MORAL DISTRESS IN EMERGENCY MEDICAL SERVICES

by

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Abstract

Emergency Medical Technicians (EMTs) are professionals that are trained to provide prehospital medical care. Emergency Medical Technicians are often exposed to imperfect work environments that can negatively impact their well-being and their ability to deliver care. Prehospital care providers are also frequently confronted with ethical dilemmas. Healthcare providers that repeatedly make ethical decisions in difficult care situations and imperfect work environments are at risk of developing moral distress.

The goal of this thesis was to analyze the known causes of moral distress in other healthcare professions to determine the sources of moral distress that are most relevant to EMTs. This thesis suggests that the documented causes of moral distress that are most relevant to EMTs include: feeling disrespected, operating in a negative ethical climate, and acting against a patient's best interest. This thesis also revealed that literature regarding moral distress in Emergency Medical Service providers is limited; Further research is required to examine the prevalence, causes, and effects of moral distress in EMTs.

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Introduction

"In case of emergency, call 911!" Individuals make this call with the assumption that the professionals that respond to an emergency can urgently and competently provide support during life's scariest and most trying moments. It is the responsibility of Emergency Medical Service (EMS) providers to assess, stabilize, and transport patients in the prehospital setting, an intervention that optimizes patient outcomes and improves public health (Klugman,2007). In the United States, there are nearly 850,000 credentialed EMS professionals (McCallion, 2011; American Ambulance Association [AAA], 2008). One in seven EMTs are between the ages of 20-49 (McCallion, 2011). The workforce is made up of individuals from all sociodemographic and professional backgrounds.

Upon arriving at the scene of an emergency, Emergency Medical Technicians (EMTs) are frequently confronted with ethical dilemmas. While stabilizing, transporting, and treating patients, EMTs also must navigate a range of ethical challenges including but not limited to informed consent, resource allocation, and whether and when to resuscitate. EMTs, physicians, and nurses frequently encounter similar moral dilemmas, although their roles in patient care are different, and their professional codes of ethics are distinct. For example, the AMA Code of Ethics allows physicians to "be free to choose whom to serve, with whom to associate, and the environment in which to provide medical care" (*American Medical Association [AMA] Code of Ethics*); By contrast, many of EMT-patient interactions are emergency matters, and take place in unchosen environments (*National Association of Emergency Medical Technicians [NAEMT] Code of Ethics*). The NAEMT Code of Ethics for EMS also requires EMTs to "work cooperatively with EMS associates and other allied healthcare

professionals in the best interest of our patients" (*NAEMT Code of Ethics*). Neither the AMA Code of Ethics nor the Code of Ethics for Nurses requires *cooperation* between healthcare professionals (*AMA Code of Ethics; American Nurses Association [ANA] Code of Ethics)*; the AMA Code of Ethics, only requires physicians to "respect the rights of patients, colleagues, and other health professionals" (*AMA Code of Ethics)*. Until the recent revision in 2013, the EMT Code of Ethics (COE) had not been updated since its publication in 1978 (Klugman, 2007; Winston, 2014). However, Winston (2014) suggests that some of the new principles, leave room for interpretation, specifically those relevant to delegation of care. Furthermore, the Code leaves out guidelines for important issues such refusal of care (Winston, 2014). Thus, the current EMT COE may need to be revisited and modified further.

Another morally-relevant dissimilarity between nurses, physicians, and EMS practitioners is the level of attention paid in the academic literature to ethical challenges. The medical and nursing codes of ethics have been periodically updated to address new ethical issues, but until recently, "EMS had been an outlier in addressing bioethical issues" (Winston, 2014). The existing literature about the EMS system in the US also is dated. The evolution of the EMS profession has created a need for updated ethical analyses of the field. An ethically relevant concept that is pervasive in medicine and nursing, but has been overlooked in EMS research, is moral distress. The term moral distress was first coined by Andrew Jameton (1984), and refers to the negative feelings one experiences when one intends to perform a morally preferred action but cannot due to institutional barriers (Jameton, 1984). Unfortunately, competency of the provider and consequently, the care of the patients, can be compromised if the provider is experiencing moral distress.

There are multiple ethical concerns regarding the existing EMS system and its providers that have been largely neglected by academic communities such as bioethics, public health and medicine. In this paper, I will argue that EMS providers experience moral distress. I will start by highlighting aspects of the history of the EMS system that set the stage for the development of moral distress. Then I will (1) explain the occupational stressors that put providers at risk for moral stress (2) identify why the stress they feel is morally relevant (3) outline some practical solutions for dealing with moral distress and (4) set an agenda for future research on moral distress in EMS.

History

The origins of modern EMS systems date back to the early 1800s, when Napoleon's physicians developed a system to evacuate injured soldiers from the field (Shah, 2006). Civilian EMS systems first appeared in the late 1800s and applied techniques used by Napoleon and his soldiers. (Shah, 2006). Throughout the late 1800s and early 1900s, the EMS system received little attention or innovation. Despite significant expansion of health care facilities, and improvement in patient care over a prolonged time, the US EMS system resembled the original French system until the 1960s (Shah, 2006).

Motivated by the post-World War II belief that "funding for scientific and technological advances would lead to improvements in health", in addition to a high prevalence of heart disease and increases in deaths due to motor vehicle accidents, the antiquated EMS system in the US received more public attention and became more structured during the 1960s and '70s (Shah, 2006, p. 414). However, this 'structured' system included unregulated services provided by hospitals, volunteer groups, and fire

departments and providers with varied professional medical training (Shah, 2006). Although there have been vast medical and technological advancements since the 1960s and 70s, the EMS system organization has seen little improvement.

One of the first attempts at improving the EMS system followed the Committee on the "*Costs of Medical Care*" report (Committee on Costs of Medical Care, 1964). The Report provided recommendations for conquering heart disease, cancer, and stroke- three serious public health burdens of the era (Shah, 2006). The report included two conclusions that suggested modifications to the EMS system. The first conclusion recommended "that the government assist in establishing regional associations centered around academic medical centers to improve research, education, and patient care" (Shah, 2006, p. 415). The second proposed "that the government work to ensure the proper dissemination of medical advances, and to translate research advances to benefit the health of the population" (Shah, 2006, p. 415). As a result, Regional Medical Programs (RMPs) were developed to address the research, education, and patient care needs emphasized in the Report (Shah, 2006). Absent from this agenda was a need to acknowledge and address the ethical issues that accompany EMS.

When RMPs were developed, there was a heavy emphasis placed on treatment of cancer, stroke, and heart disease- an initiative that left a lasting impression on EMS. Current EMS systems still focus on combatting trauma, stroke, cardiac arrest, and respiratory distress- all of which impose a high burden of disease in the US and a high mortality rate associated with delays in treatment (Frohlich et al., 2013; Hemmen, 2008). Therefore, improvements in pre-hospital care could positively impact patient outcomes. One of RMPs accomplishments was the expansion of training for EMS providers (Shah, 2006). Regional Medical Programs also led to the development of regional specialty treatment centers for injuries such as trauma and burns; these centers can provide more

rapid and focused assessments and treatments for patients (Shah, 2006). In today's EMS system, patients with trauma or burn injuries are commonly transported to these specialty centers. However, regional centers are not equally accessible to everyone; the proximity and number of trauma and burn centers varies greatly by region (Klein et al., 2009; Bell et al., 2012). Although RMPs had a significant impact on the structure and development of EMS, the system remained disorganized, lacked federal legislation and uniform standards, and allowed for social injustice (Shah, 2006).

In 1966, not long after the "Costs of Medical Care", another report called "Accidental Death and Disability: The Neglected Disease of Modern Society," was published (Shah, 2006). The report highlighted some inadequacies of the EMS system including (1) no treatment protocols; (2) few trained medical personnel; (3) inefficient transportation; (4) lack of modern communications and equipment; (5) the abdication of responsibility by political authorities; and (6) the lack of research evaluating prehospital care (Shah, 2006, p. 416). Motivated by these reports, the federal government passed The Highway Safety Act of 1996 to improve the highway safety programs and improve EMS by designing safer vehicles, less dangerous roads, better educating drivers, and improving the EMS systems' ability to safely access, stabilize, and transport injured drivers and pedestrians; However, research indicates that some of the problems that led to its implementation persist today.

After passing the 1996 Act, the government formed the Department of Transportation (DOT) which gained control of the regulation of the EMS system. The DOT served as the federal involvement for improvement of EMS factors such as equipment standards, communications, educational requirements and staffing (Shah, 2006). Although EMS has significant public health and medical importance, its assignment to the DOT rather than the Department of Health, Education, and Welfare

has hindered some of the EMS system's progression over the years. Originally, the perceived role of EMS was for transportation services (Shah, 2006). During early EMS system development, improvements in training and equipment was second to communication and transport—a concept that has not been entirely abandoned in today's system. For example, in the 1960s the American Red Cross and the American Heart Association held trainings for defibrillation, cardiopulmonary resuscitation, and pharmaceutical therapies for healthcare providers, excluding EMS personnel (Shah, 2006). Due in part to their affiliation with the DOT, EMS professionals' expertise are often dismissed and they are not afforded the same opportunities to enhance their medical knowledge and training.

Since the 1970s, some changes have been made to the EMS system and its regulation. The government's role has shifted to provide more technical assistance and coordination, and the governmental funding of EMS has declined (Shah, 2006). Tracing back to its relationship with RMPs, the funding of modern EMS systems has created a "decentralized EMS system, with variation between EMS regions" (Shah, 2006). Consequently, standards for each region are not uniform. Because of the focus on trauma and cardiac care, today's EMS systems are known for their quick response times and treatment in the field (Shah, 2006). Interestingly, such a quick response is rarely necessary and consumes materials, and human and financial capital (Shah, 2006). Unnecessary use of limited human and material resources does not allow for maximization of benefits for those in need and such disorganization has directly impacted the amount of data available for EMS.

As the medical and public health fields continue to evolve, the ethical implications of new procedures or technologies are usually considered. Medical innovations often prompt ethical questions such as "who has access to this treatment?",

"what does informed consent for this new treatment involve?", and many more. In contrast, the ethical challenges in the EMS field have not been adequately evaluated and some standards reflect old practices. While other disciplines were examining the ethical implications of new technologies, such attention was visibly absent from the EMS dialogue. Satkoske and Kappel (2014) argue that "little attention is being paid to developing ethics education that targets the needs of prehospital providers. Further, any available information is generally written by people who don't work in the prehospital realm" (Satkoske & Kappel, 2014). An ethics curriculum that is developed by other health professionals may fail to take into consideration the unique aspects of prehospital care including but not limited to the different environments in which EMS workers provide care and their need to make urgent decisions under conditions of uncertainty. This has resulted in an EMS field with severe limitations. As early as 1966 in the Accidental Death and Disability report, the lack of research regarding EMS was identified as a system flaw. Over fifty years later, the system is still failing at generating adequate data to optimize EMS as a public health intervention and analyze ethical issues in prehospital medical care. The impact that history has had on today's EMS system is undeniable. Thus, to improve the system, it is important to acknowledge the unique challenges faced by EMS workers.

The Professional Life of EMTs

Emergency Medical Service providers are responsible for rapidly responding to the scene of an emergency and can perform basic life-saving techniques including: patient assessment, controlling bleeding, managing airways, cardiopulmonary resuscitation (CPR) and use of automatic external defibrillators, emergency birth

assistance, and administration of medications. Through communication with patients, and scene and patient assessment, EMS professionals must determine what kind of care a patient should receive and how to stabilize, treat, and transport each ill or injured individual.

The professionals that work in EMS[1] face a variety of challenges due to the nature of their job. Imperfect work environments and negative ethical climates create work-related stressors, which can negatively impact EMS providers' well-being and their ability to deliver care. I identify 4 main features of the life of EMS providers that are responsible for this: (1) their unstable occupational environment (2) intense decision-making (3) inconsistencies between EMS companies (4) amount and type of training they receive.

The first source of occupational stress for EMS providers is the instability of their work environment. Most EMS systems receive an extremely variable call volume each week (*EMS System Demographics,* 2011). Emergencies are unpredictable and therefore, the number of calls an EMT responds to can change significantly from shift to shift. EMS practitioners also respond to calls in multiple unpredictable settings throughout the duration of one shift. Unlike most physicians and nurses, EMS personnel do not encounter their patients in a stable location, such as a hospital; The emergency events that they are dispatched to take place in public locations such as streets or highways, shopping centers or healthcare facilities, as well as very intimate settings such as private residences or nursing homes. Prehospital care providers work outside, in inclement weather, and at all hours of the day. Furthermore, they may arrive on scenes that are potentially violent, dangerous, or traumatic. EMTs reported that they were more upset

[1] There are many types of EMS providers, but I will use EMT-Basics and EMT-Paramedics as paradigmatic of the individuals that deliver pre-hospital care.

by calls about fires, drug overdoses, shooting or stabbing injuries and obstetrical problems (Neale, 1991). Situations that involve suffering and death can be particularly stressful for EMTs and can result in varying degrees of distress for EMTs as they witness and attempt to improve the outcome in such high stakes situations. It is nearly impossible to control all conditions in these kinds of settings, and lack of control can induce distress for EMS workers.

Unpredictable and uncontrolled situations can make medical decision making more challenging for healthcare providers. EMS providers arrive at a scene with little time to mentally or physically prepare for what they may encounter. The types of calls that EMTs respond to are varied as well. The initial job on-scene for EMTs is to stabilize the patient, regardless of the type of emergency. During training EMTs spend more time learning how to recognize, stabilize, and treat cardiac, respiratory, and trauma emergencies but they are also expected to treat less common emergencies including but not limited to geriatric, pediatric, and obstetrical emergencies. In addition, EMTs are responsible for triaging patients if there are multiple casualties. A typical EMS unit is staffed by two or three EMTs who may not work together regularly; the team must work together seamlessly to provide the best possible care to all patients they encounter. Many of the medical emergencies they respond to are life-or-death and require EMTs to make decisions very quickly. Even with medical direction from written protocols and radio communication with emergency room physicians, making high-stakes decisions in such intense situations can induce significant stress.

The type of EMS company that EMT-Basics and paramedics work for can create different occupational stressors. Six percent of EMS systems are hospital based, 21% are government-run, 25% are run by a private company, and 40% of EMS systems are operated through a fire department with cross-trained EMS personnel (*National EMS*

Assessment, 2011). The protocols, regulations and expectations of EMS personnel are different depending on which type of company they work for- as they are not uniform for government run, private owned, hospital based, and fire department systems. Differences also exist between rural and urban areas. The material and human resources available to EMS providers is not always equal between companies. Rural EMS workers often have to travel greater distances to reach care centers, and EMTs in urban systems typically work with a larger and more diverse population. Often, rural EMS is staffed by volunteers who may have little or outdated education in pre-hospital care. EMTs that work for companies that are unaffiliated with the hospital have difficulty following up with any patients after transferring them to the hospital ("FAQs for HIPAA Compliance", 2003). Thus, EMTs that work for a private EMS company may also find it difficult to create meaning in their work; EMS providers who are unable to follow-up on their patients may struggle to see a purpose in their work if they are never able to witness the outcomes of their efforts.

Another major cause for occupational stress for the EMS practitioners is the difference in financial compensation they receive compared to other clinicians. On average, a nurse in the US makes $67,490 ("Registered Nurse: Salary Details", 2017). Physicians in the emergency department make $247,000 on average, and the average salary for EMTs is $32,670 ("Emergency Room Physician-Best Jobs", 2012; US Bureau of Labor Statistics, 2015). It can be difficult for EMTs to feel motivated to excel in their position if they feel that they are undercompensated despite their integral role in patient care. Furthermore, a financial disparity between EMTs and other healthcare professionals may be a significant disincentive for prospective healthcare providers to elect to be an EMT over other allied health careers. It's possible that the pay gap may be due to the privatization of EMS companies and the desires of the companies to save

money. EMS companies may take steps to address financial pressures that impact the EMTs ability to provide care. Tension can arise if EMS practitioners want to provide the best quality care but are unable to because their company that is cutting corners to save money. Furthermore, it can be difficult to continue working in such a stressful environment when the financial compensation does not reflect the amount of work put in.

Finally, the amount and type of training that EMS providers receive can cause them undue stress. EMT-Basic courses involve 120-150 hours of coursework and typically run anywhere from four months to two years to complete ("What's the Difference Between An EMT And A Paramedic?, 2017"); paramedic training course are between 1,200-1,800 hours ("What's the Difference Between An EMT And A Paramedic?, 2017"). In comparison to other health professions, the training for EMS providers is relatively short; nurses can earn a degree through a two-year or four-year program that prepares them to be licensed, and physicians spend 8-10 years in school and residency before they can practice. A condensed program can force EMS providers to experience skill limitations when caring for patients; EMTs are expected to stabilize and initiate care for patients experiencing all types of emergencies- a feat that can be difficult even for emergency medicine physicians and nurses. In addition, EMS providers generally do not have any related job experience prior to becoming an EMT and most only possess a high-school degree (US Bureau of Labor Statistics, 2015). EMS professionals have reported feeling a lack of respect from the general public whom they serve and other health professionals, possibly because of the accelerated medical education they receive and their colleagues' perception of their confidence and competence in caring for patients (Neale, 1991). Continued disrespect from colleagues, and those they are attempting to help, can be taxing on a professional.

Moral Distress

The type of stress that many EMS providers experience is more than just occupational. EMTs are at risk of experiencing moral distress as well. Modified versions of Jameton's (1984) original definition of moral distress include: "the psychological disequilibrium and the state of negative feelings experienced when a person makes a moral decision but does not follow through by performing the moral behavior indicated by that decision" (Wilkinson, 1987). Rushton (2006) contrasts moral distress with other kinds of distress, arguing that "[moral distress] involves an irreconcilable conflict between one's ethical commitments and the action required for congruence between them". Moreover, Rushton (2006) argues that experiencing moral distress can undermine an individual's integrity and authenticity.

In recent years, this concept of moral distress has gained prominence because of its prevalence and impact on care delivery. Understanding moral distress can help illuminate the ethical challenges that EMS providers face and shed light on solutions that are needed to mitigate it.

Causes of Moral Distress

The existing literature on moral distress includes experiences from other health professionals such as physicians (Prentice, 2016), respiratory therapists, and pharmacists (Hamric & Blackhall, 2007). However, most of the work on moral distress has occurred in the nursing literature in specialties such as pediatric and neonatal care, oncology, critical care, palliative care, and emergency care (as cited in Young, 2017, p. 1). Like EMTs, nurses are often involved with difficult care situations and frequently make ethical decisions. Research on moral distress in nursing has identified various

causes of moral distress such as feeling disrespected (Oh & Gastmans, 2015, p. 27), a negative ethical climate (as cited in Oh & Gastmans, 2015, p. 24), and being forced to act in ways that are against the best interests of the patients (as cited in Oh & Gastmans, 2015, p. 23). These are not the only causes for moral distress in nurses; However, they are the causes of moral distress that are most relevant to EMTs.

Feeling Disrespected

Moral distress can affect the psychological well-being of healthcare providers (Oh and Gastmans, 2015, p. 24). Consistent with the findings of numerous nursing studies, inter- and intra-personal disrespect is a commonly reported source of moral distress that can be applied to EMTs (Pauly et al., 2009; Oh & Gastmans, 2015, p. 24-25). Lack of authority, and perceived contempt from patients and colleagues are two aspects of the EMS profession that can cause EMTs to feel disrespected.

When providing care, EMTs are required to reference both 'online' and 'offline' medical direction to guide their treatment actions. Online medical direction involves contacting an emergency room physician via radio before proceeding with an intervention. Brenner et al. (2018) argued that the use of "real-time" online medical [direction] can create moral distress for EMS workers as well as the emergency physician that is advising them (Brenner et al., 2018). Medical Directors may experience moral distress if their treatment recommendations cannot be followed because of limitations in the EMTs' abilities. If the patient care plan involves an ethical concern, this type of communication from the Medical Director may challenge the EMTs moral instincts. An EMT may experience moral distress if the medical director suggests a treatment option that does not align with what they feel is most beneficial for the

patient's well-being or does not reflect the patient's goals and/or wishes. The EMS COE states that EMTs are ethically obligated "to refuse participation in unethical procedures and assume the responsibility to expose incompetence or unethical conduct of others" (*NAEMT Code of Ethics*). An EMT that believes the directing physician's treatment decision is against a patient's goals may experience moral distress if their moral intention is to refuse participation, but they must continue to provide care because there is not another provider available to whom they can transfer care. Evidence from nurses suggests that conflicts about treatment goals lead to moral distress, emotional and spiritual exhaustion (Rushton, Batcheller, Schroeder, & Donohue, 2015).

Emergency medical services providers may also feel disrespected if their value or role as a healthcare provider is underappreciated or dismissed. An experienced EMT who is physically present with the patient and who is knowledgeable about the best treatment option for them, may feel that the lack of decision-making authority devalues their professional worth. A study of prehospital providers from West Virginia found that many EMTs perceived that other members of the medical community and lay people believe that EMS professionals do not have an equally important role in healthcare as other healthcare professionals and that EMTs work in a separate environment from physicians and nurses (Satkoske & Kappel, 2014). Some participants reported that EMTs' medical training is not recognized and many people refer to them as 'ambulance drivers' (Satkoske & Kappel, 2014). These labels fail to recognize EMTs' preparation and contribution to patient care and patient outcomes. These labels may result from lack of awareness about the roles of EMTs. In the past, nurses experienced a similar level of disrespect from physicians and other clinicians who doubted their abilities. One nurse from the Sauerland and Marotta (2014) study said: "It is very stressful and very humiliating to the point that you lose confidence in yourself"

(Sauerland & Marotta, 2014). EMTs may feel obligated to act in opposition to their moral judgement if they feel that other clinicians doubt their abilities to make the right decisions.

Some of the individuals who mistakenly refer to EMTs as 'ambulance drivers' may be the very patients who need an EMT's care. These patients may not appreciate the pivotal role that EMTs play in responding to medical emergencies while on and off duty. Emergency medical technicians are not legally required to aid injured civilians when they are off-duty (Wolfberg, 2013). However, an EMT that responds to an event- whether on-duty or off-duty, in uniform or in not in uniform- is legally bound by the duty to continue to provide care until they are relieved by another EMT (Wolfberg, 2013). Once an EMT assumes the duty to act, they are required by law to aid any, and all patients. Unlike EMTs, physicians can choose the patients to whom they provide care. If a doctor does not agree with a patient's views, or a patient is disrespectful to the physician, the doctor can transfer care to another provider (*AMA Code of Ethics*). An EMT that is treating a patient who dismisses their medical expertise or is disrespectful towards them or their values, must continue to provide care. EMTs who experience disrespect may lose confidence in their ability to perform actions that are aligned with their moral intentions when faced with an ethical dilemma in pre-hospital care.

Negative Ethical Climate

The ethical climate of an organization can affect an individual's relationship with their job and the decisions they make. Hojati and Azma (2014) and Hwang and Park (2014) describe ethical climate as an individual's perception of how ethical issues are managed in their workplace environment (as cited in Asgari, Shafipour, Taraghi &

Yazdani-Charati, 2017, p. 2). According to Olson (1998), in health care environments, these perceptions can be based on the interactions between colleagues, supervisors, patients, and/or organizations when they encounter ethical dilemmas (as cited in Asgari et al., 2017, p. 2). Asgari (2017) suggests that a negative ethical climate in a medical environment "comprises the specific organizational conditions that provide the framework for ethical decision-making and is known as a mediating factor for moral distress" (Asgari, 2017, p. 2). Studies of nurses have shown that a negative ethical climate caused more frequent, and more intense moral distress (Pauly, Varcoe, Storch, Newton, 2009). Furthermore, a study done by Olson (1998) has shown that a negative ethical climate can impact a nurse's behaviors and beliefs (as cited in Asgari et al., 2017). Though most of the literature regarding ethical climates in healthcare takes place in hospitals and clinics, it is likely that EMTs also encounter work environments that have a negative ethical climate. Inconsistent ethical policies, lack of opportunities to be involved in ethical decision-making and receive advice regarding ethical concerns, and overemphasis on economics and efficiency can create a negative ethical climate in EMS (Pauly et al., 2009).

The organization of today's EMS system remains influenced by RMPs and the past and present sources of funding for EMS. Systems that are owned by private companies are organized and operated different than publicly-owned EMS systems. Similarly, urban EMS systems serve different populations and have different resources than EMS systems that serve rural areas. Therefore, many EMTs argue that a standard prehospital ethics curriculum, especially one that is based on principles of medical ethics, may not be appropriate for these unique settings (Satkoske & Kappel, 2014). The protocols used to navigate ethical concerns may reflect the ethics curriculum of the organization or region. However, approaches to ethical concerns cannot always be

standardized. Satkoske and Kappel (2014) suggest that some ethical issues that EMTs encounter are region-specific, such as long distances to specific care centers in rural areas and confidentiality issues that arise in small towns (Satkoske & Kappel, 2014). Furthermore, they noted the potential for limited access to online medical direction in rural areas (Satkoske & Kappel, 2014). An EMT may choose to refer to existing protocols through online or offline medical direction if they are unable to navigate an ethical decision on their own. EMTs that do not receive additional guidance regarding ethical concerns may be forced to act in accordance with the offline protocol, even if they feel the suggested action is unethical. Moreover, if region-specific ethics curricula and protocols are implemented, it may be challenging for EMTs to determine which ethical dilemmas apply to which protocols.

During training, EMTs learn to master skills necessary to assess, stabilize, and safely transport patients. However, a study showed that ethical conflicts relative to their training persist, despite their specialized education (Adams, Arnold, Siminoff, Wolfson, 1992). EMTs receive training on medical ethics issues such as informed consent, patient confidentiality and non-maleficence, but ethics are not a major focus of their accelerated education. During their training, EMTs learn about debriefing techniques that are available following traumatic events such as Critical Incident Stress Management (CISM) (Halpern, Gurevich, Schwartz, Brazeau, 2008). Unfortunately, these debriefing opportunities are designed as coping mechanisms more for general stress than moral distress. An EMS system that neglects to offer opportunities for EMTs to discuss and address the moral concerns that they experience can exacerbate an EMTs perception of a negative ethical climate.

Emergency Medical Technicians suggest that "prehospital education prioritizes (or confuses) legal and protocol-driven decisions over ethical decisions," likely due in

part to EMS' affiliation with the DOT (Satkoske & Kappel, 2014). Some EMTs reported that "requests for assistance with ethical decision making, either from medical command or supervisory personnel, are often met with answers that address what's legally or professionally protective rather than what's ethically right or permissible in a particular situation" (Satkoske & Kappel, 2014). Others have even claimed that the DOT "actually reverses the meaning of ethics and morality as they are commonly used in bioethics (Klugman, 2007). Emergency medical systems that develop standard practices based solely on efficiency and financial prosperity will likely develop a negative ethical climate. Short staffing (Corley, Elswick, Gorman & Clor, 2001), long working hours, insufficient resources, and inadequate financial compensation are factors that exist in current EMS systems and negatively affect the ethical climate that EMTs work in (Pauly et al., 2009).

Truth-telling is an aspect of prehospital care that causes ethical conflicts for EMTs (Adams et al., 1992). However, the National Association of EMTs has neglected to address this ethical concern. Unlike the AMA Code of Ethics, the NAEMT COE "has no requirement regarding honesty or truth-telling" (*AMA Code of Ethics*; *NAEMT Code of Ethics*; Klugman, 2007). Despite the recent revision of the EMT COE in 2013, there have been no changes made to address the 'honesty policy' for EMTs. An antiquated code of ethics results in an ethical climate that is perceived as unwilling to adapt to changes and innovation; The burden then falls on an EMT to decide whether to act according to her own moral judgment that has evolved with the ethical landscape, or to act according to an outdated Code.

Acting Against a Patient's Best Interest

There are many times when EMTs are forced to act against their moral judgement. A few of the most noteworthy situations when EMTs may experience moral distress involve (1) a threat to the safety of the EMT, (2) challenges with informed consent, (3) providing medically ineffective treatment, (4) truth-telling.

1. Safety of the EMT

One of the first lessons in EMT training is to assess safety hazards at the scene. Due to the changing environments they work in, it is not unusual for EMTs to arrive at scenes that are potentially dangerous and pose threats like chemical spills or violence. Adams et al. (1992) reported that 19% of ethical conflicts for EMTs regard the duty of paramedics under threatening circumstances (Adams et al., 1992). Though hazardous material events are rarely the reason for contacting EMS (Martin, Lohse & Sztajnkrycer, 2015), they may be potential secondary risk factors in calls regarding motor vehicle accidents. In fact, studies of urban EMS systems found that 5% of all calls to EMS involved violence (Strote & Hutson, 2013). An EMT is directed not to enter a scene until they have determined that it is safe. Furthermore, some EMS systems direct EMTs not to enter a scene until police have arrived (Morrissey, 2011). An EMT that is on-scene and feels a duty to respond, may feel morally responsible to provide care, despite the threat to their own safety. An EMT who has such a moral intention, but does not act on it, may experience moral distress.

2. Informed Consent

When responders arrive at the scene, the informed consent process is dependent on the level of responsiveness of the patient and availability of surrogate decision makers. The EMS team must determine the decision-making capacity (DMC) of each patient (Colwell, 2016). Though EMTs are trained to determine DMC, in many emergency situations DMC may be unclear or uncertain (Colwell, 2016). It can be extremely challenging for an EMT to quickly and accurately discern a patient's capacity. An EMT must evaluate the urgency of the situation and decide if they are certain enough about a patient's capacity to abide by what the patient is saying, or if they should initiate treatment based on implied consent. Mancini (2015) noted that if a patient is unresponsive and immediate medical intervention such as cardiopulmonary resuscitation (CPR) is indicated, "a rescuer may not know who the individual is, what that individual's goals of care are, or if an advance directive exists (Mancini et al., 2015). As a result, administration of CPR may be contrary to the individual's desires or best interests." In the absence of an advance directive, an EMT is obligated to provide care such as CPR unless attempts to perform CPR would place the rescuer at risk of serious injury or there are obvious signs of irreversible death (Mancini et al., 2015). But, a valid advance directive, Physician Orders for Life Sustaining Treatment form (POLST), or a Do Not Attempt Resuscitation (DNAR) form can be extremely hard to locate during an emergency at an unknown location. If an individual who knows the patient states that the patient has one of these forms, yet cannot produce or validate it, an EMT may feel morally obligated to respect the patient's wishes but is unable to withdraw care until the form is physically available per company policies.

Patients that are capable of making their own decisions can refuse treatment or transport even if doing so is against medical advice (Colwell, 2016). The EMS team must

respect the patient's decision even if doing so could result in patient mortality. Ethical challenges with informed consent occur when competent patients refuse assistance that would be helpful to them. One study found that 27% of ethical conflicts during paramedic responses were caused by issues with informed consent (Adams et al., 1992).

Another informed consent challenge in prehospital settings that can cause moral distress is "Conflict of Hospital Destination" (Adams et al., 1992). As a result of RMPs, specialty centers exist for certain medical emergencies, such as cardiac, trauma or burn injuries. A patient or surrogate decision-maker's choice to be taken to a specific hospital may be ill-advised if they can be better cared for at a different hospital. Prehospital care providers that are knowledgeable about treatment centers may feel that it's not in the patient's best interest to be taken to their desired destination but are forced to respect the patient's decision if he or she exhibits decision-making capacity. Although patients will receive the best possible care that a facility offers no matter which destination they choose, EMTs may perceive that they are not providing the best possible service to their patients if they do not transfer them to a facility that can best provide the care that suits their medical needs.

3. Providing Medically Ineffective Care

Aggressive interventions such as CPR are not always medically beneficial for the patient. Provision of medical intervention that "will neither prevent or reduce the deterioration of the health of a patient, nor prevent the impending death of an individual" is called medically ineffective treatment (AMA "Opinions on Caring for Patients at the End of Life, 2016; *Summary of Maryland Health Care Decisions Act, 2017*). Studies show that other types of clinicians are distressed by pressure to deliver aggressive care when they believe that that is not the best option for their patient

(Beumer, 2008) and the moral distress they experience is more frequent and more intense than in other ethical situations (Oh & Gastmans, 2015, p. 27). EMS' continued focus on trauma and cardiac and respiratory emergencies often leads to aggressive care; an EMS professional that recognizes the severity of a health issue may feel that it is morally wrong to give hope to a family or patient, or to potentially inflict more harm on the patient by administering an aggressive treatment.

On the contrary, some argue that under certain circumstances, it is acceptable to deliver futile CPR for the best interests of individuals other than the patient (Bremer & Sandman, 2011). Those that make these claims suggest that EMTs may administer CPR to (1) signal that everything possible has been done, and (2) to enable the grief of the [family] to be properly addressed (Bremer & Sandman, 2011). According to this reasoning, an EMT may feel morally obligated to consider the value of resuscitative efforts for the family, unless it explicitly opposes the patient's wishes. If EMTs are forced to stop resuscitation, they could experience moral distress because they were not able to act on their moral intention.

4. Truth-telling

As previously mentioned, the standards for truth-telling for EMTs are very different than those for other health care providers. In his article titled "Why EMS Needs Its Own Ethics", Klugman (2007) recalled the following true scenario:

> "You arrive at the site of single-vehicle [motor vehicle accident]. A man in his 80's was driving, his wife in the passenger seat. You assess the man as emergent and requiring transport. The man seems unconcerned about himself but keeps asking about his wife, who is dead. What do you tell him?"

Klugman suggests that EMTs following the EMT COE would avoid telling the whole truth in hopes of ensuring a more compliant patient, and thus a better health outcome (Klugman, 2007). In the above scenario, the EMT "told the driver that his wife was receiving the best care possible and that they had to concentrate on taking care of him" (Klugman, 2007) An EMT in this situation may feel that although they told the patient what they perceived to be the truth, withholding the entire truth may not have been in the patient's best interest. The EMT's moral integrity is at stake if they feel obligated to withhold information from a patient to produce a better health outcome-even though it would be morally preferable to tell them.

The four ethical challenges discussed above are exacerbated in the prehospital setting due to time constraints. Most patient-provider encounters take place in a clinic or hospital over an extended period of time, allowing for discussions of diagnosis and participation in shared decision-making regarding a treatment plan. However, as noted by Klugman (2007), in EMS, limited time exists for detailed "deliberative decision-making" or "consulting colleagues and professional literature when providing care." When EMTs are forced to make difficult ethical decisions in prehospital settings under severe time restrictions, they risk abandoning their moral instincts and developing moral distress.

Consequences of Moral Distress

Data from other healthcare disciplines indicates that moral distress impacts the well-being of providers, the institutions they work for, and the patients they care for. It stands to reason that these consequences may also be true for EMTs but it has yet to be

studied. Moral distress can lead to burnout, job dissatisfaction, turnover, and emotional isolation from patients- all of which can consequently affect patient care (Rushton, Batcheller, Schroeder & Donohue, 2015; Neale, 1991; Austin, Saylor & Finley, 2011; Oh & Gastmans, 2015). Studies have shown that moral distress leads to burnout in many other healthcare professionals. Nurses who experienced moral distress reported feelings of emotional exhaustion and depersonalization, two components of burnout syndrome (Oh & Gastmans, 2015). Rushton et al. (2015) found that "nurses working in high-risk areas, especially critical care, are at increased risk for burnout." EMS providers, who practice in uncontrolled, high-risk settings and make high-stakes decisions on a frequent basis, are susceptible to high rates of burnout as well. A study of retired EMS professionals confirmed this theory; 92% of participants recognized a definite burnout condition for EMS practitioners (Neale, 1991). Neale (1991) suggested that burnout was a result of occupational and moral stressors such as worry about non-controllable environmental factors such as infectious diseases and perceptions of being treated poorly by other healthcare providers. Perceived lack of control, moral distress, and depersonalization can lead to feelings of powerlessness and decreased job satisfaction among nurses (Rushton et al., 2015).

In 2017, Austin, Saylor and Finley found that "22% of physicians and 35% of nurses have left a position in the past or are currently considering leaving their position due to [moral distress]" (Austin, Saylor & Finley, 2017, p. 402). Blau and Chapman (2011) claimed that burnout, a symptom of moral distress, was the most common cause for EMTs to leave EMS; surprisingly, inadequate financial compensation was the least important factor in the decision to leave EMS (Blau & Chapman, 2011). Because of the occupational and moral stress that EMTs experience, it is unsurprising that retired EMTs experienced a significant increase in life satisfaction following a career change

from EMS (Blau & Chapman, 2011). When nurses leave their jobs due to persistent moral stress, there is an undeniable effect on the institution and healthcare systems (Oh & Gastmans, 2015) The same can be said for EMTs who decide to leave EMS. In a system that is historically known for being unorganized, high turnover can be detrimental for the growth and development of EMS.

Practitioners who constantly perform under time constraints, experience internal and external conflicts regarding treatment, and deal with the emotional fatigue of burnout can deliver suboptimal care to patients. Physicians and nurses who experience moral distress commonly report emotional exhaustion (Austin et al., 2017), emotional isolation from patients (Oh & Gastmans, 2015), and consequently, suboptimal patient care. These feelings are exacerbated when providers are faced with ethical decisions regarding end of life or futile care (Austin et al., 2017). These symptoms are dangerous in a profession like EMS that is plagued with ethical dilemmas and relies on empathetic and intentional patient care.

Possible Solutions for Moral Distress

A variety of solutions have been proposed to combat moral distress in other clinical settings. Ruston et al. (2015) suggest that professionals that experience moral distress should identify the barriers within themselves and the organization that contributed to their distress. For EMS providers, this could include the unstable environment they work in, intense decision-making, the kind of company they work for and/or the amount of training that they have. By identifying these barriers, EMS practitioners can develop individual- and system-focused interventions, which have shown to be effective in combatting moral distress for critical care nurses (Rushton et

al., 2015). A personal action plan, developed for critical care nurses, has shown promise for clinicians that work in high-stress environments (McCue, 2010). Said plan asks nurses to (1) ask themselves if they are showing signs of distress or suffering, (2) affirm their distress and their commitment to take care of themselves, (3) identify the sources of their stress, and (4) prepare to take action and maintain the desired change (McCue, 2010). The same plan could be applied to EMS providers.

A healthy ethical climate allows a practitioner to do what they know is ethically correct. The limitations imposed upon EMS providers often impact their abilities to perform the treatments they perceive to be the most beneficial for patients. Regular debriefing for practitioners who experience these internal conflicts could reduce the emotional and psychological impacts that they experience as a result of misaligned morals. Rushton et al. (2015) suggest that among nurses, encouragement of spiritual well-being and cultivating hope may also help mitigate moral distress. These ideas could also be applied to EMS. Rushton et al.'s (2015) study of nurses reported that "hope can reduce moral distress, enhance resilience, and prevent burnout, cultivating a [clinician's] capacity to hope may offer an antidote to attrition in the profession and to the detrimental effects of moral distress." Application of this same solution to the EMS profession could help diminish moral distress and burnout. Increased hope may also translate to increased hope for patients and consequently, better quality patient care.

Implications for Future Research

The public health value of EMS is undeniable. However, research and data on the EMS system in the US is lacking. What is certain, however, is that EMS workers are in danger of operating in environments that can lead them to make decisions that they

do not consider ethically correct. High-stress environments, conflicts regarding treatment decisions, time constraints, and feelings of powerlessness can create an unhealthy work environment for EMS professionals. To improve work environments, it is critical that medical, public health and bioethics communities acknowledge the value that EMS has in pre-hospital care and their roles as practitioners. This can be accomplished through collecting more generalized data on EMS systems and EMTs, and by initiating research on moral distress in EMS. In addition, it is the obligation of healthcare systems to implement policies that create a healthy work environment.

I suggest that further research is needed to understand the prevalence, causes, and effects of moral distress in EMS. Further research is needed to understand how EMTs are affected by feeling disrespected, a negative ethical climate, and acting against a patient's best interest. Research should focus on causes and effects of moral distress from EMTs' point of view as well as evaluation of the organizational factors that can be associated with development of moral distress. For example, EMS systems should re-evaluate the existing EMT COE and update sections that reflect outdated practices or ideals. Acknowledging moral distress and implementing appropriate coping mechanisms could improve the well-being of EMTs and is in the interest of best quality care for patients in prehospital settings.

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Biography

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Caitlin received her undergraduate degree from Michigan State University where she double majored in Genomics and Molecular Genetics and Human Biology, and minored in Spanish. During her undergraduate studies, she worked as an Undergraduate Research Assistant at the Institute for Integrative Toxicology in Dr. John LaPres' laboratory. During her last semester at Michigan State, she spent six weeks in Oaxaca, Mexico studying international healthcare.

Caitlin is also a certified EMT-Basic through the National Registry of Emergency Medical Technicians and the Virginia Commonwealth.

In 2016, Caitlin began her MBE at the Berman Institute of Bioethics at Johns Hopkins University. She also earned a certificate in Adolescent Health from Bloomberg School of Public Health.